

UDOT University College of Systems Planning and Programming Academic Business Plan

Vision

UDOT College of Planning and Programming will be the place for advancing careers and developing an appreciation of planning and programming. UDOT College of Planning and Programming will become a college that provides the workforce with a board array of entry-level classes. Subjects will cover all areas of Planning and Programming.

Setting the stage:

Since all areas will be covered it is expected that all in Planning will at times be teachers. Classes will be informal. Settings might include; brown bag lunches, periodic visits to regions, webinars, PDConnect, or articles in blogs or newspapers.

Strengths: Classes will be structured to introduce the workforce to Planning. Most class content has already been developed (from previous PowerPoint presentations) therefore classes could begin early rather than later.

Classes

Strategy – Asset Management

Asset management is a "way of doing business." It suggests principles and techniques to apply in policy-making, planning, project selection, program tradeoffs, program delivery data gathering, and management system application.

- 1. Educate students on elements of an effective Asset Management Program.
- 2. Introduce cross asset management analysis.
- 3. Compare element of an effective pavement management program and bridge management program.

Initiatives: Provide training in the following areas.

- 1. Visit each Region
- 2. Engineering Conference
- 3. Webinars Presentations
- 4. Provide training, presentations MPOs, Local Government
- 5. Publish in appropriate Newsletter, UDOT Blog.



Strategy – Annual Statistical Summary

- 1. Present, inform and educate Department personnel on the Annual Statistical Summaries and how they can benefit from information contained in report.
- 2. What is the Annual Statistical Summaries: The Annual Statistical Summaries have been prepared to serve two needs; first, to publish the data which is most frequently requested by local agencies, and second, to provide a convenient source of historical reference material for use by Department staff and the Transportation Commission.

Initiatives: Provide training in the following areas.

- 1. 30 minute brown bag seminar
- 2. Webinars Presentations
- 3. Customer feedback, Improvements
- 4. Publish in appropriate Newsletter, UDOT Blog.

Strategy - American Recovery and Reinvestment Act

Utah has received \$213 million to be used on both state and local transportation projects, as part of the American Recovery and Reinvestment Act (ARRA) of 2009, the federal government's economic stimulus plan. The federal funds will be used on 104 pavement preservation, bridge rehabilitation and capacity improvement projects statewide that would not have been completed without the stimulus funding.

- 1. Educate students on the American Recovery and Reinvestment Act.
- Introduce student to the process of selecting project for inclusion in the ARRA program.

Initiatives: Provide training in the following areas.

- 1. 30 minute brown bag seminar
- 2. Engineering Conference
- 3. Webinars Presentations

Strategy – Enhancement Program

- 1. Introduce Staff to the Transportation Enhancement Program.
- 2. Show presentation of past Enhancement Projects.

The Transportation Enhancement Program provides opportunities to use federal highway dollars to enhance the cultural, aesthetic and environmental aspects of the nation's inter-modal transportation system. Utah's annual apportionment this program is



approximately \$6,000,000. Historically, \$2,000,000 has been programmed for local government projects and \$4,000,000 programmed on UDOT Transportation Enhancement Projects.

Initiatives: Provide training in the following areas:

- 1. Project Application Form and Materials
- 2. Current Enhancement Program
- 3. FHWA Transportation Enhancement Guidance
- 4. National Transportation Enhancement Clearinghouse

Strategy - Highway Referencing and Highway Resolutions

The Roadway Milepost data contains route locations, descriptions and various features. All constructed routes are referenced and listed in their entirety. The Milepost publications present locations in accumulated mileage format representing actual mileage along the route from the routes beginning location. The staff of the Roadway section would appreciate being notified if any errors are discovered or if you have questions regarding routes or reference information.

Highway Resolutions

- 1. Educate students on history and importance of highway resolutions.
- 2. Show how to lookup and utilize the highway resolutions on the web.

Highway Referencing:

- 1. Educate students on the importance of highway referencing and the guiding principles behind the UDOT system.
- 2. Introduce student to the different types of highway referencing systems.
- 3. Show how to use the current UDOT highway referencing system and how it was developed.

Initiatives:

- 1. 30 minute brown bag seminar
- 2. Visit each Region
- 3. Webinars Presentations
- 4. Provide training, presentations to MPOs and Local Government.
- 5. Customer feedback, Improvements
- 6. Publish in appropriate Newsletter, UDOT Blog.

Strategy - Local Government Assistance



Provide training in the following areas.

- 1. Annual Visits to Local Agencies
- 2. Class B & C Road Funds
- 3. Flexible Match for Federal-Aid Project
- 4. Mineral Lease Funds
- 5. Off-System Bridge Soft Match Credit Program

Initiatives:

- 1. 30 minute brown bag seminar
- 2. Visit each Region
- 3. Engineering Conference
- 4. Provide training, presentations MPOs, Local Government

Strategy - Project Prioritization

The Decision Support System (DSS) is a data-driven analysis of the relative strengths of the capacity projects proposed in the first phase of the Unified Plan. Each project receives a score based on functional classification of the facility, current and projected future traffic volumes, truck traffic, and safety benefits. The system ranks the projects list using these objective criteria to assist the Utah Transportation Commission in deciding which project to fund and add from the long-range plan into the Statewide Transportation Improvement Program (STIP). The four DSS files provided here are the output of the prioritization process, showing the funding sources and amounts allocated to each project.

In addition to major capacity projects from the long range plan, a funding source was created to address smaller-scale projects that could be addressed more quickly and that would alleviate specific traffic bottlenecks, The fifth file presents the prioritization of these "choke point" projects.

Provide training in the following areas.

- 1. Upgrade Existing At Grade Intersections
- 2. New Interchanges on Existing Freeways
- 3. Major Capacity Improvement New Facilities
- 4. Major Capacity Improvement Widening Existing Facilities
- 5. Choke Point/Highway Construction Program
- 6. Critical Highway Needs Fund (CHNF)

Initiatives:



- 1. 30 minute brown bag seminar
- 2. Visit each Region
- 3. Engineering Conference
- 4. Customer feedback, Improvements
- 5. Publish in appropriate Newsletter, UDOT Blog.

Strategy - Public Transit

The Public Transit Team (PTT), with funding from the federal government, administers federal transportation programs that fund agencies providing transportation services to people living in Utah.

- 1. FTA Grant Programs
- 2. Rural Transit Assistance Program
- 3. Special Studies
- 4. State Management Plan
- 5. Statewide Transit Coordination
- 6. Transit Guide and Report

Initiatives:

- 1. 30 minute brown bag seminar
- 2. Webinars Presentations
- 3. Provide training, presentations MPOs, Local Government
- 4. Publish in appropriate Newsletter, UDOT Blog.

Strategy - Research

Research is paving the way to the future in Utah. Every year new technologies are tested and implemented to improve transportation, to save lives and reduce transportation costs. The activities within Research are broad, ranging from advancing the science of transportation engineering in emerging areas to implementing the use of new products on a daily basis. The research reach involves planning, design, construction, operations, and maintenance activities. The pages listed below contain the products of research – reports, data, newsletters, and answers – moving transportation into the future.

- 1. UTRAC Workshop
- 2. Research Vision and Services
- 3. Experimental Features
- 4. New Product Evaluation
- Pavement Marking
- 6. Technology Transfer



7. Lester Wire Library

Initiatives:

- 1. 30 minute brown bag seminar
- 2. Visit each Region
- 3. Engineering Conference
- 4. Webinars Presentations
- 5. Customer feedback, Improvements
- 6. Publish in appropriate Newsletter, UDOT Blog.

Strategy - Statewide Transportation Improvement Program

UDOT's Statewide Transportation Improvement Program (STIP) is a five-year plan of highway and transit projects for the State of Utah. The STIP is maintained daily and includes transportation projects on the state, city and county highway systems as well as projects in the national parks, national forests and Indian reservations. These projects use various federal and state funding programs.

- 1. Introduce students to the purpose of the STIP and how proposed projects are selected for inclusion in the STIP.
- 2. Introduce students to the Transportation Improvement Program (TIP).
- 3. Layout the STIP development process and identify the various funding categories and how money is appropriated to the funding categories and eventually funding projects.

Initiatives:

- 1. 30 minute brown bag seminar
- Visit each Region
- 3. Engineering Conference
- 4. Webinars Presentations
- Publish in appropriate Newsletter, UDOT Blog.

Strategy - Traffic Statistics

The department has a variety of publications for traffic volume data.

- 1. Identify the type of highway related traffic data the department collects.
- Teach students how the data is collected and processed.
- 3. Introduce how the data is used in developing maintenance strategies.
- 4. Teach students how the traffic volume data is used to create the Average Annual Daily Traffic (AADT).



5. Teach Students how the Vehicle Miles of Travel (VMT) is calculated and how this valuable information is used.

Initiatives:

- 1. 30 minute brown bag seminar
- 2. Customer feedback, Improvements
- 3. Publish in appropriate Newsletter, UDOT Blog.

Strategy - Transportation Planning and Studies

Transportation planning helps to identify important transportation problems and possible solutions. Transportation planning identifies what services transportation customers, including citizens and business, need and balances those needs with competing demands to form a common vision and a plan that is financially feasible.

Introduce attendees to the following aspects of Transportation Planning activities.

- 1. Air Quality Planning
- 2. Walking and Biking Planning
- 3. Rural Planning Organization Guidelines
- 4. Project Prioritization
- 5. Mapping Services
- 6. Transportation Studies and plans including:
 - a. East-West Transportation Studies
 - b. Emerging Areas & Community Transportation Plans
 - c. Long Range 30 year Transportation Plan
 - d. Managed Lanes Study

Initiatives:

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Strategy – TravelWise Utah

Introduce the Solution to Growing Transportation Demand. As Utah continues to experience unprecedented growth, challenges inevitably follow. To address some of the transportation challenges created by this growth, the Utah Department of Transportation (UDOT) developed TravelWise—a set of strategies that encourage Utahns to use



alternatives to driving alone. The state of Utah is asking individuals, businesses and organizations to implement TravelWise strategies in an effort to reduce energy consumption, reduce traffic congestion and improve air quality, ultimately improving the quality of life in Utah.

Introduce attendees to the various aspects of TravelWise Utah including:

- 1. Active Transportation
- 2. Carpooling & Vanpooling
- 3. e-Travel
- 4. Public Transit
- 5. Tele-working
- 6. Trip Chaining
- 7. Use of Technology

Initiatives:

- 1. 30 minute brown bag seminar
- 2. Engineering Conference
- 3. Webinars Presentations
- 4. Customer feedback, Improvements
- 5. Publish in appropriate Newsletter, UDOT Blog.

Resources

Classes will require preparations (but limited because of the use of previous PowerPoint presentations). Administration will be required. We estimate approximately ¼ FTE to track scheduling, distribution of class content and performance measures.

Benchmarks

Because classes are informal, performance measurements will be simple. Tracking will include; number of courses taught, students, and name of classes and supervisors.